CHECKLIST OF VICTORIAN DRAGONFLIES (INSECTA : ODONATA)

I. D. Endersby

56 Looker Road, Montmorency, Victoria 3094, Australia

Endersby, I. D., 2000:06:30. Checklist of Victorian dragonflies (Insecta : Odonata). *Proceedings of the Royal Society of Victoria* 112(1): 59–64. ISSN 0035-9211.

An annotated checklist is given for the dragonfly fauna currently known from Victoria. The fauna comprises 74 species: 26 Zygoptera and 48 Epiproctophora (formerly Anisoptera). New distribution records and taxonomic nomenclatural changes since 1974 are detailed.

SINCE the publication of a checklist of Victorian dragonflies by Hutchinson (1975) a number of nomenclatural changes and additional distribution records have been made. Hutchinson's list was based on that of Watson (1974) to which he added his own observation of a specimen of *Austrolestes aridus* (Tillyard). The species which he lists as 'Caliagrion lyelli' is a typographical error for the two species *Caliagrion billinghursti* (Martin) and *Coenagrion lyelli* (Tillyard).

Watson (1977) published a supplement which added Hutchinson's *Austrolestes aridus* record and one of *Trapezostigma loewii* (Kaup) to the Victorian fauna. In his key to larvae of south-eastern Australia, Hawking (1986) provided a checklist of adults based on the nomenclature of Watson (1974), covering 'Victoria and eastern South Australia and new material ... from throughout the River Murray catchment' and adding a number of new records. The Odonata volume of the Zoological Catalogue (Houston & Watson 1988) recognised the family Protoneuridae, some genus name changes and new records. Watson et al. (1991) gave the most comprehensive Australian review of the Order Odonata since that of Fraser (1960), describing new species and providing keys to species, distribution data and ecological notes. Major phylogenetic studies have been undertaken recently, particularly in Germany, America and Australia, and Hawking & Theischinger (1999) provided a new Australian checklist recognising these works, particularly the familial and higher level classification of Bechly (1996). Hawking & Theischinger (1999) recognise that Bechly's analyses are not universally accepted with the caveat that 'it is not, however, our intention to support or criticise'. Similarly, this checklist uses their classification purely as a framework to record those species known to have been found within Victoria to date and the nomenclatural changes that have occurred since 1974.

CHANGES TO FAMILIAL NOMENCLATURE

Protoneuridae

Hutchinson (1975), following Watson (1974), retained the genera *Isosticta* Selys and *Oristicta* Tillyard in the family Protoneuridae. Fraser (1960) recognised two subfamilies, Protoneurinae (containing *Nososticta* Hagen) and Isostictinae, and Hawking (1986) acknowledged this within his key to the larvae. Watson & Theischinger (1984) still maintained these two subfamilies but they were accorded familial rank by Davies (1981) and subsequent Australian authors have followed him. Bechly (1996) regards the Isostictinae as a subfamily of Protoneuridae but Hawking & Theischinger (1999) retain it at family level.

ANISOPTERA

Traditionally three suborders of Odonata have been recognised: Zygoptera, Anisoptera and the Anisozygoptera with extant species only in Japan and Nepal. Bechly (1996) renamed the Anisozygoptera to Epiophlebiidae and combined it with the Anisoptera to form a new suborder Epiproctophora, used by Hawking & Theischinger (1999) and, therefore, in this summary of Victorian species.

Austropetaliidae

Victoria's only representative of the family Austropetaliidae is *Austropetalia tonyana* Theischinger. At the time of Hutchinson's (1975) checklist it was still considered to be a member of the Aeshnidae but Houston & Watson (1988) placed it in Neopetaliidae, following Davies (1981). The family Neopetaliidae was restricted to Australia, New Zealand and Chile. Relocation of the genus *Neopetalia* Cowley to the Libelluloidea by

Carle & Louton (1994) caused them to erect a new family, Austropetaliidae, which contains the Australian species.

Aeshnidae

One of Bechly's (1996) revisions was to remove a number of genera from the family Aeshnidae to a new family Telephlebiidae. The effect for Victorian species was to retain only *Aeshna brevistyla* (Rambur) and *Hemianax papuensis* (Burmeister) in Aeshnidae. Hawking & Theischinger (1999) agree that the split is consistent with a major character state in their key: the larval epiproct is concave at the tip for Aeshnidae but pointed in Telephlebiidae.

Corduliidae

Watson (1974) recognised Synthemidae as a separate family from the Corduliidae, as did Hutchinson (1975). Davies (1981) retained it as the family Synthemistidae, but Theischinger & Watson (1984) relegated it to subfamilial status as Synthemistinae within Corduliidae.

Major changes have occurred with the division of the former family Corduliidae. Of the new families, those found in Victoria are the Synthemistidae, Austrocorduliidae, Cordulephyidae and Hemicorduliidae. These groupings are not inconsistent with the field appearance of the relevant species.

CHECKLIST

Order Odonata
Suborder Zygoptera
Family Hemiphlebiidae
***Hemiphlebia mirabilis* Selys** 1
Family Synlestidae
***Synlestes weyersii* Selys** 2
[*Synlestes tillyardi* Martin] 2
Family Lestidae
***Austrolestes analis* (Rambur)**
***Austrolestes annulosus* (Selys)**
***Austrolestes aridus* (Tillyard)** 3
***Austrolestes cingulatus* (Burmeister)**
***Austrolestes io* (Selys)**
***Austrolestes leda* (Selys)**
***Austrolestes psyche* (Hagen)**
Family Megapodagrionidae
***Austroargiolestes calcaris* (Fraser)** 4
***Austroargiolestes icteromelas* (Selys)** 4
***Griseargiolestes eboracus* (Tillyard)** 5
***Griseargiolestes intermedius* (Tillyard)** 5
Family Protoneuridae
***Nasosticta solida* (Hagen)**
Family Isostictidae
***Labidiosticta vallisi* (Fraser)** 6
[*Rhadinosticta banksi* (Tillyard)] 8
***Rhadinosticta simplex* (Martin)** 7
Family Coenagrionidae
***Austroagrion watsoni* Lieftinck** 9
***Austrocnemis splendida* (Martin)**
***Caliagrion billinghursti* (Martin)**
***Coenagrion lyelli* (Tillyard)**
***Ischnura aurora* (Brauer)**
***Ischnura heterosticta* (Burmeister)**
***Pseudagrion aureofrons* Tillyard** 10
***Xanthagrion erythroneurum* (Selys)**
Family Diphlebiidae (formerly Amphipterygidae)
***Diphlebia lestoides* (Selys)**
***Diphlebia nymphaides* Tillyard**
Suborder Epiproctophora (formerly Anisoptera)
Family Austropetaliidae (formerly part of Neopetaliidae)
***Austrapetalia tonyana* Theischinger** 11
Family Telephlebiidae (formerly part of Aeshnidae)
[*Acanthaeschna victoria* Martin] 15
***Austroaeschna atrata* Martin** 12
***Austroaeschna flavomaculata* Tillyard**
***Austroaeschna inermis* Martin**
[*Austroaeschna longissima* (Martin)] 13
***Austroaeschna multipunctata* (Martin)**
***Austraaeschna parvistigma* Selys**
***Austroaeschna pulchra* Tillyard** 13
***Austroaeschna subapicalis* Theischinger** 14
***Austroaeschna unicornis* (Martin)** 13
***Dendraaeschna conspersa* (Tillyard)** 16
***Nataaeschna sagittata* (Martin)**
***Spinaeschna tripunctata* (Martin)** 17
***Telephlebia brevicauda* Tillyard**
Family Aeshnidae
***Aeshna brevistyla* (Rambur)**
***Hemianax papuensis* (Burmeister)**
Family Gomphidae
***Antipodogomphus aeolytus* (Martin)**
***Austrogomphus angelorum* Tillyard** 18
***Austragamphus australis* Dale**
***Austrogomphus cornutus* Watson** 19
***Austrogomphus guerini* (Rambur)**
***Austrogomphus ochraceus* (Selys)**
***Hemigomphus gouldii* (Selys)**
***Hemigomphus heteroclytus* Selys** 20
Family Synthemistidae (formerly part of Corduliidae)
***Archaeosynthemis maerostigma orientalis* (Hagen)** 21
***Ensynthemis brevistyla* (Selys)**
***Ensynthemis guttata* (Selys)**

Ensynthemis tillyardi **Theischinger** **22**
Ensynthemis virgula **(Selys)**
Parasynthemis regina **(Selys)** **23**
Synthemis eustalaeta **(Burmeister)**
Family Austrocorduliidae (formerly part of Corduliidae)
Apocordulia maerops **Watson** **24**
Austrocordulia refraeta **Tillyard** **25**
Family Cordulephyidae (formerly part of Corduliidae)
Cordulephya pygmaea **Selys**
Family Hemicorduliidae (formerly part of Corduliidae)
Hemicordulia australiae **(Rambur)**
[*Hemicordulia novaehollandiae*] **26**
Hemicordulia tau **(Selys)**
Procordulia jacksoniensis **(Rambur)**
Family Libellulidae
Austrothemis nigrescens **(Martin)**
Crocothemis nigrifrons **(Kirby)** **25**
Diplacodes bipunctata **(Brauer)**
Diplacodes haematodes **(Burmeister)**
Diplacodes melanopsis **(Martin)**
Nannophlebia risi **Tillyard** **28**
Nannophya australis **Brauer** **29**
Nannophya dalei **(Tillyard)**
Orthetrum caledonicum **(Brauer)**
Orthetrum villosovittatum **(Brauer)**
Pantala flavescens **(Fabricius)** **30**
Trapezostigma loewii **(Kaup)** **31**

DISCUSSION

Paragraph numbering follows the notes shown in the Checklist table.

1. In spite of its type locality being given as Port Denison (now Bowen, Queensland) *Hemiphlebia mirabilis* Selys has long been considered to be endemic to Victoria. However, Trueman et al. (1992) recorded it from north-east Tasmania and Endersby (1993) recorded its discovery on Flinders Island.

2. *Syndestes weyersii* and *S. tillyardi* were recognised as good species in all Australian references until Watson et al. (1991) who treated *tillyardi* (and *nigrescens* from the Sydney region) as subspecies of *S. weyersii*.

3. Hutchinson (1975) reported one sighting (presumably his own) from the Big Desert as the only known occurrence of *Austrolestes aridus* in Victoria. Subsequently, Hawking (1994) recorded it from Middle Creek, 5 km SE of Wodonga (September 1988).

4. All Victorian species in the family Megapodagrionidae, at the time of Hutchinson's (1975) checklist, were considered to be in the genus *Argiolestes*. In a review of the genus Theischinger & O'Farrell (1986) resurrected the name *Austroargiolestes*, and *A. calcaris* and *A. icteromelas* were included in it, the others remaining in *Argiolestes*.

5. *Argiolestes griseus* had been divided into a number of subspecies, primarily by Tillyard (1912). Watson et al. (1991) considered four of these to be specifically distinct, the Victorian members being *Argiolestes eboracus* and *A. intermedius*. Theischinger (1998) divided the Australian species previously in the genus *Argiolestes* into three genera, those in the *A. griseus* complex becoming *Griseargiolestes*.

6. In a revision of the Isostictidae, Watson et al. (1991) erected the new genus *Labidiosticta* for *Oristicta vallisi*.

7. Watson, in Watson et al. (1991), in his revision of the Isostictidae transferred the Australian species of *Isosticta* to a new genus *Rhadinosticta*.

8. *Rhadinostieta banksi* (as *Isosticta banksi*) was listed by Watson (1974), and therefore Hutchinson (1975) and Hawking (1986), as occurring in Victoria. Houston & Watson (1988) do not list it for Victoria but Watson et al. (1991) do, with a question mark against the entry. Except for this doubtful Victorian record the distribution is south-eastern Queensland, north-eastern Queensland, Cape York Peninsula, 'Top End' Northern Territory and the Kimberley region of Western Australia. Hawking & Theischinger (1999) do not include it their checklist for New South Wales and it is highly unlikely to have been found in Victoria.

9. After viewing the type of *Pseudagrion cyane* Selys, Lieftinck (1982) recognised that it was synonymous with the Western Australian species *Austroagrion coeruleum* Tillyard, thus requiring a new name for the eastern species, *Austroagrion watsoni*. Hutchinson (1975) and Watson (1974) predated this change but Hawking (1986) lists both *A. watsoni* and *A. cyane*, the latter only from south-eastern South Australia. Houston & Watson (1988) and Watson et al. (1991) recognise it from that region.

10. Hawking (1986) adds *Pseudagrion aureofrons* to the Victorian list and this is maintained by subsequent authors. It is very common in the Ovens, Campaspe and Broken rivers (Hawking, pers. comm. 1999).

11. Theischinger (1995a) considered the specimens of *Austropetalia patricia* from the Blue Mountains to be specifically different from those inhabiting the southern highlands, which includes Victorian specimens. He named the southerly group *A. tonyana* but acknowledged that more material is required to clarify the status of populations from southern Victoria. Carle (1996) also recognised two forms of *A. patricia* and he raised the name *A. victoriae*, but the distribution patterns show sympatry and differ from those of Theischinger (1995a). Lohmann (1996) considered *A. victoria* to be a synonym of *A. tonyana*.

12. Although Lieftinck (1951) attempted to show that *Acanthaeschna* had priority over *Austroaeschna* for the known species in this genus, Allbrook & Watson (1978) studied new material of *Acanthaeschna victoria* and found it not to be congeneric. As *A. victoria* was the type species for *Acanthaeschna* they resurrected *Austroaeschna* for the other species.

13. After reviewing the history of *Austroaeschna* nomenclature Theischinger (1982) realised that '... what has been called *longissima* is really *unicornis*, and what has been called *unicornis* is really *pulchra*'. So, the *A. longissima* in Hutchinson's (1975) list disappears and *A. pulchra* is added. All subsequent authors agree.

14. Theischinger (1982) separated a new species, *Austroaeschna subapicalis*, from specimens previously identified as *A. atrata*.

15. Although Martin (1901) did not list *Acanthaeschna victoria* for Victoria he did so in Martin (1909) (*fide* Hutchinson 1975). Watson (1974) queried the Victorian record and no author since has included it in the Victorian fauna. Hawking & Theischinger (1999) have only two records for the 20th Century and give as its distribution northern New South Wales and southern Queensland. It is highly likely that Martin's (1909) record was an error.

16. The first reference to *Dendroaeschna conspersa* as a Victorian species is Houston & Watson (1988), based on specimens of larvae collected in 1983 and 1985. Hawking (1991) documents the discovery.

17. Theischinger (1982) moved *Austroaeschna tripunctata* into a new genus *Spinaeschna*.

18. Hawking (1986) includes *Austrogomphus angeli* in his list but as it covers 'adults from Victoria and eastern South Australia ...' he is quoting Watson's (1974) south-eastern South Australia locality (Hawking, pers. comm. 1999). Houston & Watson (1988) and Watson et al. (1991) quote it directly from Victoria but Watson (1991) notes that it has been found only in the Murray River, listing specimens from New South Wales—Wentworth and Corowa.

The species was named by Tillyard (1913) in recognition of the two brothers (S. & F. Angel) who discovered it. Consequently Peterson (1993) emended the specific epithet to the plural form of *angelorum*. Peterson (1993) also states that only twenty adult specimens have been collected to date.

19. Hutchinson (1975) listed *Austrogomphus* sp. 'c' following Watson (1974) who included a number of undescribed genera and species using code letters. The Zoological Catalogue (Houston & Watson 1988) referred to *Austrogomphus doddi* Tillyard as *Austrogomphus* sp. 'c' but Watson (1991) described it as a new species *Austrogomphus cornutus*. Watson (op. cit.: 393) discusses the confusion between *A. doddi* and *A. cornutus*.

20. Houston & Watson (1988) include *Hemigomphus heteroclytus* as a Victorian species as do Watson et al. (1991), noting its similar appearance to *H. gouldii*. Watson (1991) gives precise collection localities for both species.

21. From a major phylogenetic study, Carle (1995) placed three species of *Synthemis*, including *Synthemis macrostigma*, in a new genus *Archaeosynthemis*. Hawking & Theischinger (1999) state that the eastern Australian *A. macrostigma orientalis* is possibly a distinct species.

22. Whilst unravelling the *Eusynthemis guttata* group of sibling species Theischinger (1995b) raised *Metathemis guttata* (Selys) var. *pallida* (Tillyard 1910) to full species status and named it *Eusynthemis tillyardi*.

23. In the same study in which he named the genus *Archaeosynthemis*, Carle (1995) recognised *Synthemis regina* as monotypic at generic level and placed it in a new genus as *Parasynthemis regina*.

24. *Apocordulia macrops* was raised from larvae to maturity by Watson (1980) and named in a new genus and species. Their crepuscular flight times are probably the cause of them remaining unrecognised for so long. It is now known to occur in small stretches of the Broken, Campaspe and Loddon rivers and also in Gippsland (Hawking, pers. comm. 1999).

25. Thiesehinger & Watson (1984) did not list any Victorian localities for *Austrocordulia refracta* but Watson (1974) includes it in southern New South Wales. Hawking (1986) records it from Gippsland and subsequently Watson et al. (1991) and Hawking & Theisehinger (1999) list it from Victoria.

26. Watson (1974) included *Hemicordulia novaehollandiae* in the Victorian fauna, marked with a question mark. Hutchinson (1975) followed him but commented that the species is known from one imperfect female and is of doubtful specific status. Fraser (1960) is the source of the comment and Houston & Watson (1988) give for its distribution 'Australia, no known locality'.

27. Hawking (1986) records *Crocothemis nigrifrons* from eastern Gippsland and has now found it in billabongs in northeast Victoria (Hawking, pers. comm. 1999). Hawking & Theischinger (1999) have a category VIC in their distribution list but none of the intervening authors (eg. Houston & Watson 1988; Watson et al. 1991) have recognised it for the state.

28. *Nannophlebia risi* was added to the Victorian fauna by Hawking (1986) from records from the Kiewa River and Hawking & Theischinger (1999) have a map showing a collection locality from the Murray River near Jingellic.

29. The first reference to *Nannophya australis* as a Victorian species is that of Houston & Watson (1988).

30. *Pantala flavescens* is the most recent addition to the Victorian list (Hawking & Ingram 1994) from larvae which are probably the progeny of migratory adults.

31. Hutchinson (1977) gives the first record of *Trapezostigma loewii* from Victoria. Watson (1977) incorporated this observation into his first supplement and Hawking (1986) listed it from billabongs in northeast Victoria.

SUMMARY

Hutchinson (1975) listed 64 species of Odonata for Victoria (26 Zygoptera and 38 Anisoptera) but the total now stands at 74 (26 Zygoptera and 48 Epiproctophora). The changes for the Zygoptera are due to one new sighting (*Pseudagrion aureofrons*), a net gain of one from taxon splitting (*Argiolestes griseus* revealed *Griseargiolestes eboracus* and *G. intermedius*), one species was lost by taxon lumping (*Synlestes tillyardi*), and one was an incorrect record (*Isosticta banksi*). For the Epiproctophora, 9 new sightings occurred (*Austrocordulia refracta*, *Austrogomphus angelorum*, *Crocothemis nigrifrons*, *Dendroaeschna conspersa*, *Hemigomphus heteroclytus*, *Nannophlebia risi*, *Nannophya australis*, *Pantala flavescens* and *Trapezostigma loewii*), one new species was discovered (*Apocordulia macrops*), two species arose from taxon splitting (*Austroaeschna subapicalis* and *Eusynthemis tillyardi*), and there were two incorrect or unsubstantiated records (*Austroaeschna victoria* and *Hemicordulia novaehollandiae*).

ACKNOWLEDGEMENTS

Thanks are due to John Hawking for valuable discussions on Victorian dragonflies and the provision of his unpublished observations, to Günther Theischinger for provision of reprints, and to both of them for their comprehensive summary of recent taxonomic changes. Thanks also to Magnus Peterson for a copy of his paper.

REFERENCES

Allbrook, P. & Watson, J. A. L., 1978. The status of the Australian aeshnid genera *Acanthaeschna* Selys and *Austroaeschna* Selys (Odonata). *Journal of the Australian Entomological Society* 17: 323–327.

Bechly, G., 1996. Morphologische Untersuchungen am Flügelgeäder der rezenten Libellen und deren Stammgruppenvertreter (Insecta; Pterygota; Odonata) unter besonderer Berücksichtigung der phylogenetischen Systematik und des Grundplanes der Odonata. *Petalura, Special Volume* 2: 1–402.

Carle, F. L., 1995. Evolution, taxonomy, and biogeography of ancient Gondwanian libelluloides, with comments on anisopteroid evolution and phylogenetic systematics (Anisoptera : Libelluloidea). *Odonatologica* 24: 383–424.

Carle, F. L., 1996. Revision of Austropetaliidae (Anisoptera : Aeshnoidea). *Odonatologica* 25: 231–259.

Carle, F. L. & Louton, J. A., 1994. The larva of *Neopetalia punctata* and establishment of Austropetaliidae fam. nov. (Odonata). *Proceedings of the Entomological Society of Washington* 96: 147–155.

Davies, D. A. L., 1981. *A synopsis of the extant genera of the Odonata*. Societas Internationalis Odonatologica Rapid Communications, No. 3. Utrecht, i–xiv + 1–59.

Endersby, I. D., 1993. A new locality record for *Hemiphlebia mirabilis* (Selys) (Zygoptera : Hemiphlebiidae). *Notulae Odonatologicae* 4: 31–32.

Fraser, F. C., 1960. *A Handbook of the Dragonflies of Australasia*. Royal Zoological Society of New South Wales, Sydney, 68 pp. + 27 pls.

HAWKING, J. H., 1986. *Dragonfly larvae of the River Murray system. A preliminary guide to the identification of known final instar odonate larvae of south-eastern Australia.* Technical Report No. 6, Albury Wodonga Development Corporation, Wodonga, iv + 65 pp.

HAWKING, J. H., 1991. The first record of the dragonfly *Deudroaeschna conspersa* from Victoria. *Victorian Naturalist* 108: 6–7.

HAWKING, J. H., 1994. *The distribution and ecology of dragonflies (Insecta : Odonata) in the Kiewa River System, Victoria.* MSc Thesis, La Trobe University, Bundoora.

HAWKING, J. H. & INGRAM, B. A., 1994. Rate of larval development of *Pantala flavescens* (Fabricius) at its southern limit of range in Australia (Anisoptera : Libellulidae). *Odonatologica* 23: 63–68.

HAWKING, J. H. & THEISCHINGER, G., 1999. *Dragonfly larvae (Odonata). A guide to the identification of larvae of Australian families and to the identification and ecology of larvae from New South Wales.* Cooperative Research Centre for Freshwater Ecology Identification Guide No. 24. Albury, iv + 218 pp., 8 pls.

HOUSTON, W. W. K. & WATSON, J. A. L., 1988. Odonata. In *Zoological Catalogue of Australia*, Vol. 6, W. W. K. Houston, ed., pp. 33–132. Australian Government Publishing Service, Canberra.

HUTCHINSON, J. F., 1975. The Dragonflies (Odonata) of Victoria. *Victorian Entomologist* 5: 104–107.

HUTCHINSON, J. F., 1977. An addition to the dragonfly fauna of Victoria. *Victorian Entomolagist* 7: 76.

LIEFTINCK, M. A., 1951. Results of the Archbold Expeditions, No. 64. Odonata of the 1948 Archbold Cape York expedition, with a list of the dragonflies from the Peninsula. *American Museum Novitates* 1488: 1–46.

LIEFTINCK, M. A., 1982. Settling up matters of taxonomy, nomenclature, and synonymy in the genus *Austroagrion* Tillyard (Zygoptera : Coenagrionidae). *Odonatologica* 11: 287–295.

LOHMANN, H., 1996. Das phylogenetische System der Anisoptera (Odonata). Erster Nachtrag. *Entomologische Zeitschrift* 106: 360–367.

MARTIN, R., 1901. Les odonates du continent Australien. *Mémoires de la Société zoologique de France* 14: 220–248.

MARTIN, R., 1909. Aeschnines. Fasc. XIX, pp. 85–156, pls 3–4. In *Collections Zoologiques du Baron Edmund de Selys Longchamps*, Institut Royal des Sciences Naturelles de Belgique, Brussels.

PETERSON, M., 1993. A nomenclatural/conservation note on an Australian dragonfly species (Odonata : Gomphidae). *Sydney Basin Naturalist* 2: 21.

THEISCHINGER, G., 1982. A revision of the Australian genera *Austroaeschna* Selys and *Notoaeschna* Tillyard (Odonata : Aeshnidae : Brachytroninae). *Australian Journal of Zoology, Supplementary Series* 87: 1–67.

THEISCHINGER, G., 1995a. A second species of *Austropetalia* Tillyard from Australia (Odonata : Austropetaliidae). *Linzer biologische Beiträge* 27: 291–295.

THEISCHINGER, G., 1995b. The *Eusynthemis guttata* (Selys) group of species from Australia (Odonata : Synthemistidae). *Linzer biologische Beiträge* 27: 297–310.

THEISCHINGER, G., 1998. Supra-specific diversity in Australian '*Argiolestes*' (Odonata : Zygoptera : Megapodagrionidae). *Stapfia* 55: 613–621.

THEISCHINGER, G. & O'FARRELL, A. F., 1986. The genus *Austroargiolestes* Kennedy (Zygoptera : Megapodagrionidae). *Odonatologica* 15: 387–428.

THEISCHINGER, G. & WATSON, J. A. L., 1984. Larvae of Australian Gomphomacromiinae, and their bearing on the status of the *Synthemis* group of genera (Odonata : Corduliidae). *Australian Journal of Zoology* 32: 67–95.

TILLYARD, R. J., 1910. Monograph of the genus *Synthemis*. *Praceedings of the Linnean Society of New South Wales* 35: 312–377.

TILLYARD, R. J., 1912. On some new and rare Australian Agrionidae (Odonata). *Proceedings of the Linnean Society of New South Wales* 37: 404–479.

TILLYARD, R. J., 1913. Some descriptions of new forms of Australian Odonata. *Proceedings of the Linnean Society of New South Wales* 38: 229–241.

TRUEMAN, J. W. H., HOYE, G. A., HAWKING, J. H., WATSON, J. A. L. & NEW, T. R., 1992. *Hemiphlebia mirabilis* Selys: new locations in Australia and perspectives on conservation (Zygoptera : Hemiphlebiidae). *Odonatologica* 21: 367–374.

WATSON, J. A. L., 1974. The distributions of the Australian Dragonflies. *Journal of the Australian Entomological Society* 13: 137–149.

WATSON, J. A. L., 1977. The distributions of the Australian Dragonflies (Odonata): First Supplement. *Journal of the Australian Entomological Society* 16: 277–279.

WATSON, J. A. L., 1980. *Apocordulia macrops*, a new crepuscular gomphomacromiine dragonfly from south-eastern Australia (Odonata : Corduliidae). *Journal of the Australian Entomological Society* 19: 287–292.

WATSON, J. A. L., 1991. The Australian Gomphidae. *Invertebrate Taxonomy* 5: 289–441.

WATSON, J. A. L. & THEISCHINGER, G., 1984. The Australian Protoneurinae (Odonata). *Australian Journal of Zaology, Supplementary Series* 98: 1–51.

WATSON, J. A. L., THEISCHINGER, G. & ABBEY, H. M., 1991. *The Australian Dragonflies—a guide to the identification, distribution and habitats of Australian Odonata.* CSIRO Australia, Canberra and Melbourne, vii + 278 pp.